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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,030	09/27/2001	Yoshikatsu Niwa	450100-03503	2594

20999 7590 06/17/2005

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EXAMINER

SHIN, KYUNG H

ART UNIT PAPER NUMBER

2143

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/965,030	<b>Applicant(s)</b> NIWA ET AL.	
	<b>Examiner</b> Kyung H. Shin	<b>Art Unit</b> 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/27/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/18/05</u> . | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is responding to application papers filed 3/21/2005.
2. Claims 1 - 12 are pending. Claims 1 - 12 have been amended. Independent claims are 1, 5, 9.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection, as explained here below, necessitated by Applicant's substantial amendment (i.e., *wherein at least one packet of data is transmitted in an asynchronous mode independent of a routing table.*) to the claims which significantly affected the scope thereof.

- 3.1 Applicant argues that the prior art does not disclose the capability to resend more than once a large asynchronous data packet when destination node is not connected. Yeung in view of Bastiani discloses the capability to resend an asynchronous data packet one or more times (i.e. resend more than once) due to a communications fault (i.e. destination not connected) and sets an error condition (i.e. predetermined error condition) for transmission to end node. (see Bastiani col. 9, lines 30-36; col. 34, lines 6-9: resends large asynchronous data packets more than once due to an error condition

(i.e. destination node not connected); col. 34, lines 12-16: error condition set)

3.2 The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Furthermore, in response to applicant's arguments against the reference individually, one cannot show nonobviousness by attacking references individually where rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

#### **Claim Rejection - 35 USC § 103**

4. **Claims 1 - 3, 5 - 7, 9 - 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yeung** (US Patent No. 6,643,702) in view of Bastiani et al. (US Patent No. 6,636,922).

Yeung discloses a data packet processing apparatus, network system, data transfer method system to transfer data packets on an input and output port (bus)

selected from among a plurality of buses for network communications. (see Yeung col. 2, lines 44-56: “ ... a switch ... stores switched packet streams to be transmitted ... having ingress ports ... egress ports ... number of ingress ports and egress ports in the switch may vary depending on ... how many devices or buses are served by the switch ... ”)

**Regarding Claims 1 (Currently Amended), 5 (Currently Amended), 9 (Currently Amended),** Yeung does not disclose determining that the destination node is not connected. However, Bastiani discloses a data transfer apparatus, network system, data transfer method for connecting buses comprising:

- a) transmitting means for determining according to the destination information whether the node serving as a destination of the data is connected to one of the buses, wherein, it determines that the node is not connected, a data transmission source receives a predetermined error information; and (see Bastiani col. 9, lines 30-36; col. 34, lines 6-19: path failure notification, determined destination node not connected (i.e. path fault), predetermined alarm (i.e. action) completed)
- b) wherein at least one packet of data is transmitted in an asynchronous mode independent of a routing table. (see Bastiani col. 9, lines 30-36; col. 8, lines 22-25: asynchronous devices utilized in communication network)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yeung to determine destination node not connected and to process communications fault as taught by Bastiani. One of ordinary skill in the art would be motivated to employ Bastiani in order to provide

and optimize a more robust communications protocol between host system and peripherals in network environment. (see Bastiani col. 2, lines 19-22: “ ... *providing an advanced serial protocol (ASP) that defines a more robust data transmission environment for communication between host computers and peripheral devices ...* ”)

**Regarding Claims 2 (Currently Amended), 6 (Currently Amended), 10 (Currently Amended),** Yeung does not disclose the determination that the destination node exists on a network. However, Bastiani discloses the data transfer apparatus, network system, data transfer method according to claims 1, 5, 9, wherein the transmitting means determines according to the destination information whether the bus to which the node serving as the destination of the data is connected, exists on a network, and wherein when the bus does not exist, transmits predetermined error information to the data transmission source. (see Bastiani col. 9, lines 30-36; col. 34, lines 6-19: path analysis and failure notification sequence or predetermined alarm (action) is completed when it is determined that destination node is not connected or path fault)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yeung to determine that the destination node is not connected and to process communications fault as taught by Bastiani. One of ordinary skill in the art would be motivated to employ Bastiani in order to provide and optimize a more robust communications protocols between a host system and peripherals in network environment. (see Bastiani col. 2, lines 19-22: “ ... *providing an advanced serial protocol (ASP) that defines a more robust data transmission environment for*

*communication between host computers and peripheral devices ... “)*

**Regarding Claims 3 (Currently Amended), 7 (Currently Amended), 11 (Currently Amended),** Yeung discloses the data transfer apparatus, network system, data transfer method according to claims 1, 5, 9, wherein the data transfer apparatus is connected to another bus through a second data transfer apparatus, and wherein the data transfer apparatus further comprises transfer means for transferring the data from the data transfer apparatus to the second data transfer apparatus according to the destination information. (see Yeung col. 2, lines 44-56: destination network node is another data processing apparatus)

5. **Claims 4, 8, 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeung-Bastiani and further in view of **Kralem et al.** (US Patent No. 6,370,369) and further in view of **Lappetelainen et al.** (US Patent No. 6,693,915).

**Regarding Claims 4 (Currently Amended), 8 (Currently Amended), 12 (Currently Amended),** Yeung does not disclose an IEEE 1394 data transfer apparatus based on the BRAN specification. Lappetelainen discloses that the BRAN specification is equivalent to the HIPERLAN specification (see Lappetelainen col. 1, lines 46-51: HIPERLAN specification equal to BRAN specification) and Kraiem discloses an IEEE 1394 data transfer apparatus based on the HIPERLAN specification. (see Kraiem col. 1, lines 11-17; col. 1, lines 56-60: HIPERLAN (High Performance Radio Access

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Network) or BRAN (Broadband Radio Access Network) specification and wireless IEEE 1394 standards for a network device used in data transmissions) Therefore, the combination of Kraiem and Lappetelainen discloses the data transfer apparatus according to claims 1, 5, 9, wherein the data transfer apparatus is an IEEE-1394 bridge device conforming to the BRAN specification.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yeung to utilize a wireless IEEE 1394 device operating as a bridge based on the BRAN (HIPERLAN) specification as taught by Kraiem and Lappetelainen. One of ordinary skill in the art would be motivated to employ Kraiem in order to interconnect IEEE 1394 buses in a wireless network environment to more effectively utilize radio (i.e. wireless) resources (see Kraiem col. 1, lines 5-10: “... *transmit and receiving antenna diversity in wireless networks ... network devices, e.g. mobile terminals, directly communicate with each other without using a central station or access point as repeater ...*”; col. 2, lines 32-37: “... *network devices can easily be adapted to the inventive method without considerable changes in hardware, but by mainly providing the new control method for antenna diversity ...*”) and to employ Lappetelainen in order to effectively optimize performance of radio based communications. (see Lappetelainen col. 4, lines 52-57: “... *attain more effective utilization of the radio resources ... produce a more disturbance-free data transmission system ...*”)

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H. Shin whose telephone number is (571) 272-3920. The examiner can normally be reached on 9 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*KHS*  
Kyung H Shin  
Patent Examiner  
Art Unit 2143

KHS  
June 8, 2005

  
WILLIAM C. VAUGHN, JR.  
PRIMARY EXAMINER